

# Agent Orange Brief

Prepared by the Environmental Agents Service (131)  
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## AGENT ORANGE AND HODGKIN'S DISEASE

### What is Hodgkin's disease?

Hodgkin's disease is a malignant lymphoma characterized by progressive enlargement of the lymph nodes, liver, and spleen, and by progressive anemia.

### Why are Vietnam veterans concerned about Hodgkin's disease? Is it caused by Agent Orange?

Some Vietnam veterans have been diagnosed with Hodgkin's disease and others have expressed concern about developing this cancer. Some research has suggested that Hodgkin's disease may be associated with exposure to herbicides, but there is no conclusive scientific evidence that Agent Orange or other herbicides cause this condition.

A Department of Veterans Affairs (VA) study, published in the Annals of Epidemiology in September 1995, concluded that service in Vietnam was not associated with any significant increased risk of Hodgkin's disease. Furthermore, other measures of potential Agent Orange exposure, such as service in a specific military branch, in a certain region within Vietnam, in a combat role, or extended Vietnam time, were not associated with any significant increased risk of Hodgkin's disease.

### What did the National Academy of Sciences (NAS) conclude about Hodgkin's disease in its 1993 report, entitled Veterans and Agent Orange - Health Effects of Herbicides Used in Vietnam?

The NAS reviewers reported that nearly all of the case-control and agricultural worker studies they evaluated show increased risk for this disease. Although only a few of these results are statistically significant, those that are show a positive association. Those that are not statistically significant generally indicate increased risk of Hodgkin's disease, and the pattern of the results is notably consistent.

Hodgkin's disease has a number of clinical features that typically differ from other lymphomas. While there were fewer studies for Hodgkin's disease than for non-Hodgkin's lymphoma, the NAS noted that the pattern of results was consistent with the findings for non-Hodgkin's lymphoma and

concluded that there was sufficient evidence for a positive association between exposure to the herbicides used in Vietnam and the development of Hodgkin's disease.

**What was VA response to the NAS finding?**

After reviewing the NAS report and noting (1) the difficulty in distinguishing between Hodgkin's disease and non-Hodgkin's lymphoma, (2) the occasional development of both diseases in the same patient, and (3) the biologic relationship between the two diseases in terms of origin, Secretary Brown determined that there is an association between exposure to herbicides used in Vietnam and the subsequent development of Hodgkin's disease which manifests itself to a degree of ten percent at any time after exposure.

The proposed rule on Hodgkin's disease was published for public comment in the Federal Register in September 1993. (See 58 Fed. Reg. 50524, September 28, 1993). The final rule implementing the Secretary's determination was published in the Federal Register in February 1994. (See 59 Fed. Reg. 5106, February 3, 1994).

**What did Public Law 103-446 do for Vietnam veterans with Hodgkin's disease?**

Section 505, Public Law 103-446, Veterans' Benefits Improvements Act of 1994, enacted November 2, 1994, codified (established in law) presumptions of service connection for Vietnam veterans for certain diseases -- including Hodgkin's disease manifested to a degree of disability of 10 percent or more -- associated with exposure to certain herbicide agents.

**What did the NAS conclude about Hodgkin's disease in the 1996 update?**

The 1996 report declared the "recent evidence continues to support the conclusions of a positive association between exposure to herbicides and Hodgkin's disease."

**What did the NAS conclude about Hodgkin's disease in the 1998 update?**

The 1998 report stated, "...data drawn from agricultural, production, and environmental exposures and, more recently, from Vietnam veterans continues to support the conclusions of a positive association between herbicides and HD."

**Where can a veteran get additional information on this subject?**

Information on Hodgkin's disease and related matters can be obtained at VA medical center libraries, from the Registry Physicians at every VA medical center, or from the Environmental Agents Service (131), Department of Veterans Affairs, 810 Vermont Avenue, N.W., Washington, DC 20420.